

I am an extra class Amateur Radio Operator (N4AOF), a licensed GMRS operator (WPOL710), communications officer for the local unit of the American Red Cross, and an active participant in several organized volunteer emergency communications programs.

Broadband communications over any inherently unshielded infrastructure such as PTSN or power lines is known to generate excessive RF noise levels throughout the vicinity. Since such connections are, by their very nature, in exactly the same vicinity as homes and businesses it is clear that the interference by such wired systems cannot be effectively isolated from wireless communications in many radio services where weak signal communications are common. The most obvious impacts would be to deliberate weak signal communications in the Amateur Radio Service, but such broadband RF noise will have a detrimental effect on all conventional radio communications. Because the noise will be broadband and constant, even spread spectrum digital communications systems will suffer at least some degradation of service due to increased background noise levels.

While most deliberate weak signal communications are focused on scientific research or hobby technical advancement, there are numerous instances on a daily basis when emergency communications must be performed in a weak signal environment. Weak signal emergency communications are not by choice but rather by the nature of available equipment and the locations of stations involved in the emergency. Any system that raises the overall RF noise floor is going to seriously interfere with such communications. The RF noise pollution that would be generated by broadband over the traditional telephone or power line networks poses an unacceptable risk of interference to vital communications.